AFOSR Provides Early Support for Principal Archi of Computer Revolution

Back in the early 1960's, AFOSR Project Supervisor Mrs. Rowena Swanson probably didn't realize the tremendous impact one contract, No. AF49(638-1024) and the resulting report, No. AFOSR 3233 would have on both the military and civilian community.

After all, the researcher's colleagues and prospective employers didn't offer much support for his vision of augmenting human intellect and the potential of computers to assist people in complex decision-making.

For some reason, AFOSR did see the potential and awarded a contract to Dr. Doug Englebart at the Stanford Research Institute.

"I got some money from a small Air Force Office for Scientific Research, and there was enough there along with SRI's (Stanford Research Institute) contribution I could work full time for a couple of years and produce what I called *Augmenting Human Intellect: A Conceptual Framework,"* said Englebart in a May, 1994 interview.

That resulting work, published in 1962, serves as a sort of roadmap for developing computer technologies. Engelbart believed that the complexity of problems facing mankind was growing faster than the ability to solve them.

"We envisioned problem-solvers using computer-aided working stations to augment their efforts. They required the ability to interact with information displays using some sort of device to move (a cursor) around the screen," said Dr. Englebart in published interviews.

In his report, Engelbart gives some clues as to where computing would develop.

He suggested the development of an auxiliary device, a gadget "that is held like a pencil and, instead of a point, has a special sensing mechanism that you can pass over a line of the special printing from your writing machine (or one like it). The signals which this reading stylus sends through the flexible connecting wire to the writing machine are used to determine which characters are being sensed and thus to cause the automatic typing of a duplicate string of characters. An information-storage mechanism in the writing machine permits you to sweep the reading stylus over the characters much faster than the writer can type; the writer will catch up with you when you stop to think about what word or string of words should be duplicated next, or while you reposition the straightedge guide along which you run the stylus.

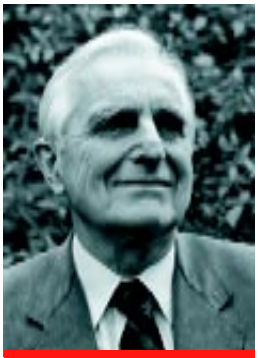
Today, that gadget is known as a mouse.

"A bonus feature," as Engelbart describes it, would be a common working structure so that individuals, as part of a team, can work on the same project simultaneously. "The whole team can join forces at a moment's notice to 'pull together' on some stubborn little problem, or to make a group decision."

He called it inter-communication via computer, today it is called networking.

Englebart's report, with AFOSR support, is filled with concepts that have materialized and fueled the Information Age.

More information on Engelbart's work, *Augmenting Human Intellect: A Conceptual Framework*, as well as his current initiatives can be accessed at: **www.bootstrap.org**



Dr. Doug Englebart

As the inventor of the mouse and scores of computer-related innovations, Dr. Engelbart has a thirty-year track record in predicting, designing and implementing the future direction of organizational computing.